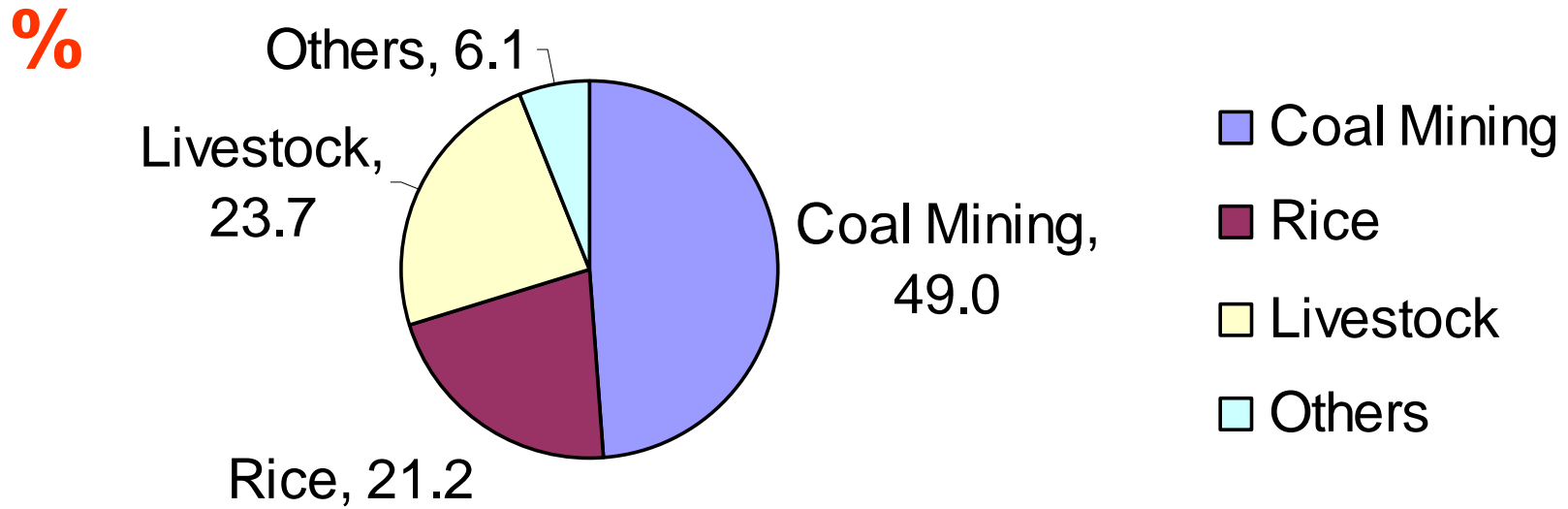


# Methane (CH<sub>4</sub>) emissions in China from 1981 to 2010

# Main sources of CH<sub>4</sub> emission in China



In 2007, the total CH<sub>4</sub> emission was estimated as **39.6 Tg CH<sub>4</sub> yr<sup>-1</sup>**. The main three sources of CH<sub>4</sub> **Coal Mining, Livestock, Rice** contribute **94%** of the total CH<sub>4</sub> emission.

# Data sources

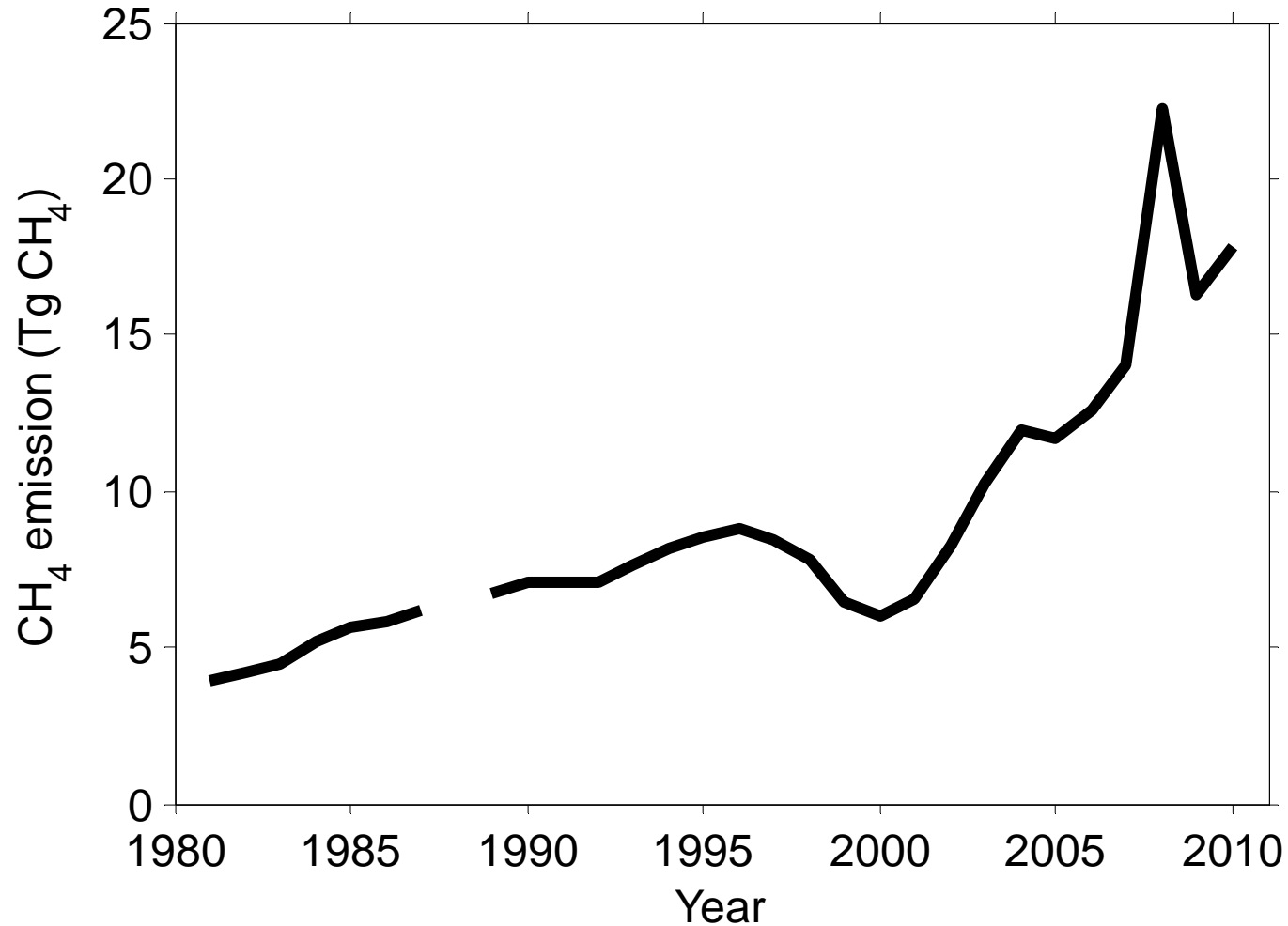
- China Agriculture Yearbook
- China Energy Statistical Yearbook
- China Environment Yearbook
- China Statistical Yearbook

**Province Level yearly rice cultivation area, fertilization amount, livestock ;**

**County level yearly raw coal production;**

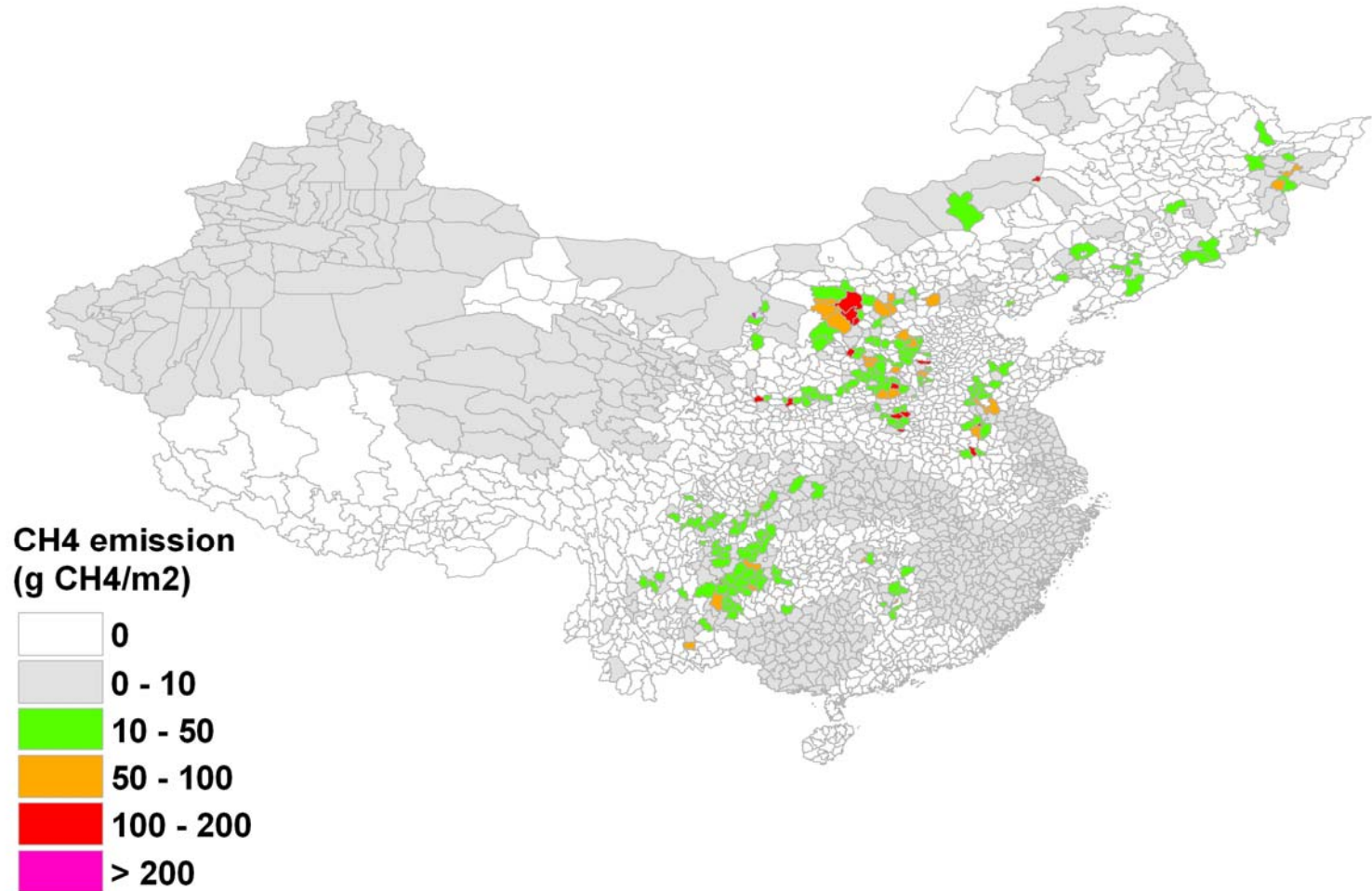
**Emission factors from papers.**

# Total CH<sub>4</sub> emission from coal Mining

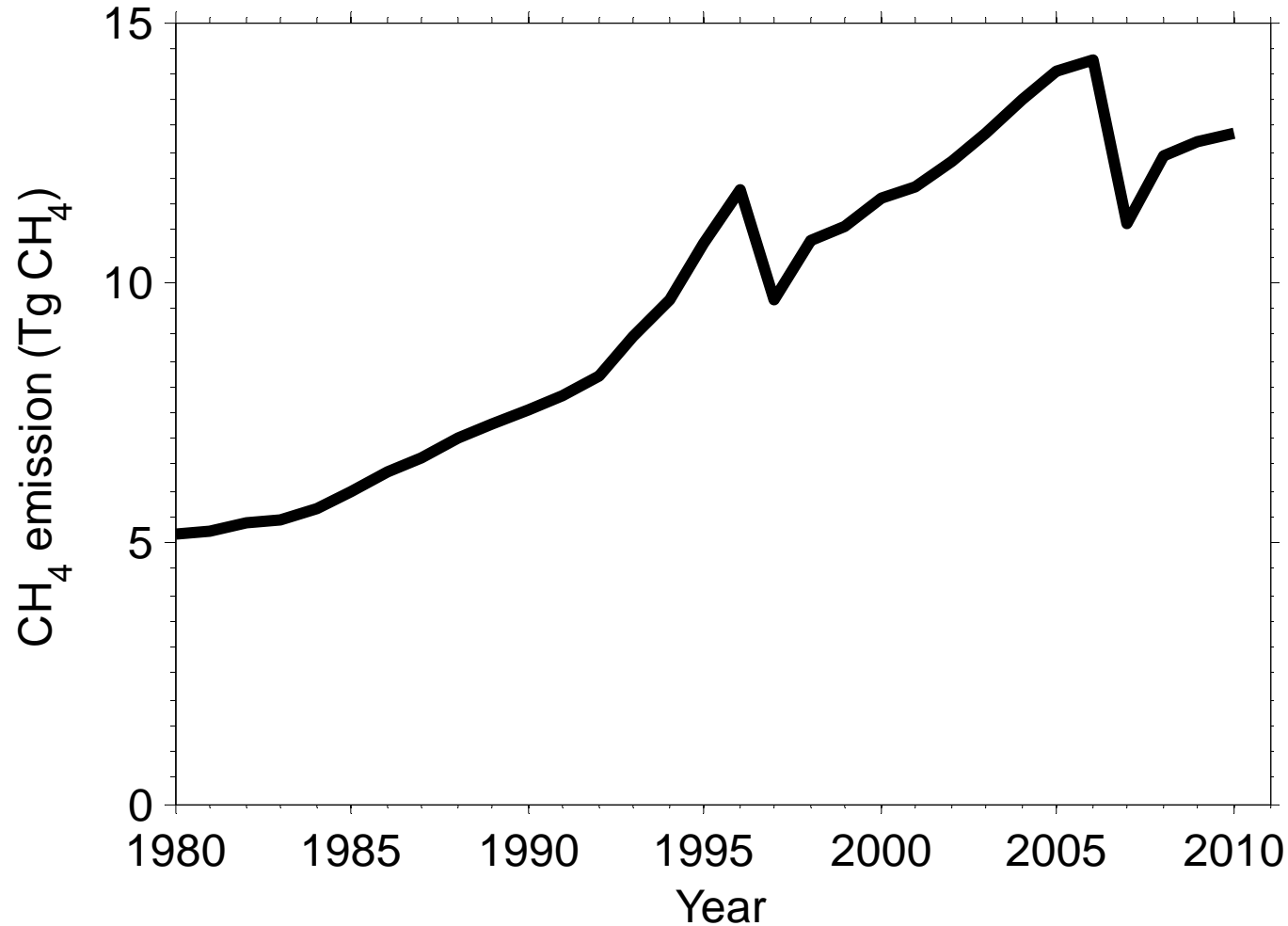


**Methods from Zheng et al., 2005, Coal Safety**

# Spatial patterns of CH<sub>4</sub> emission from coal mining in 2010

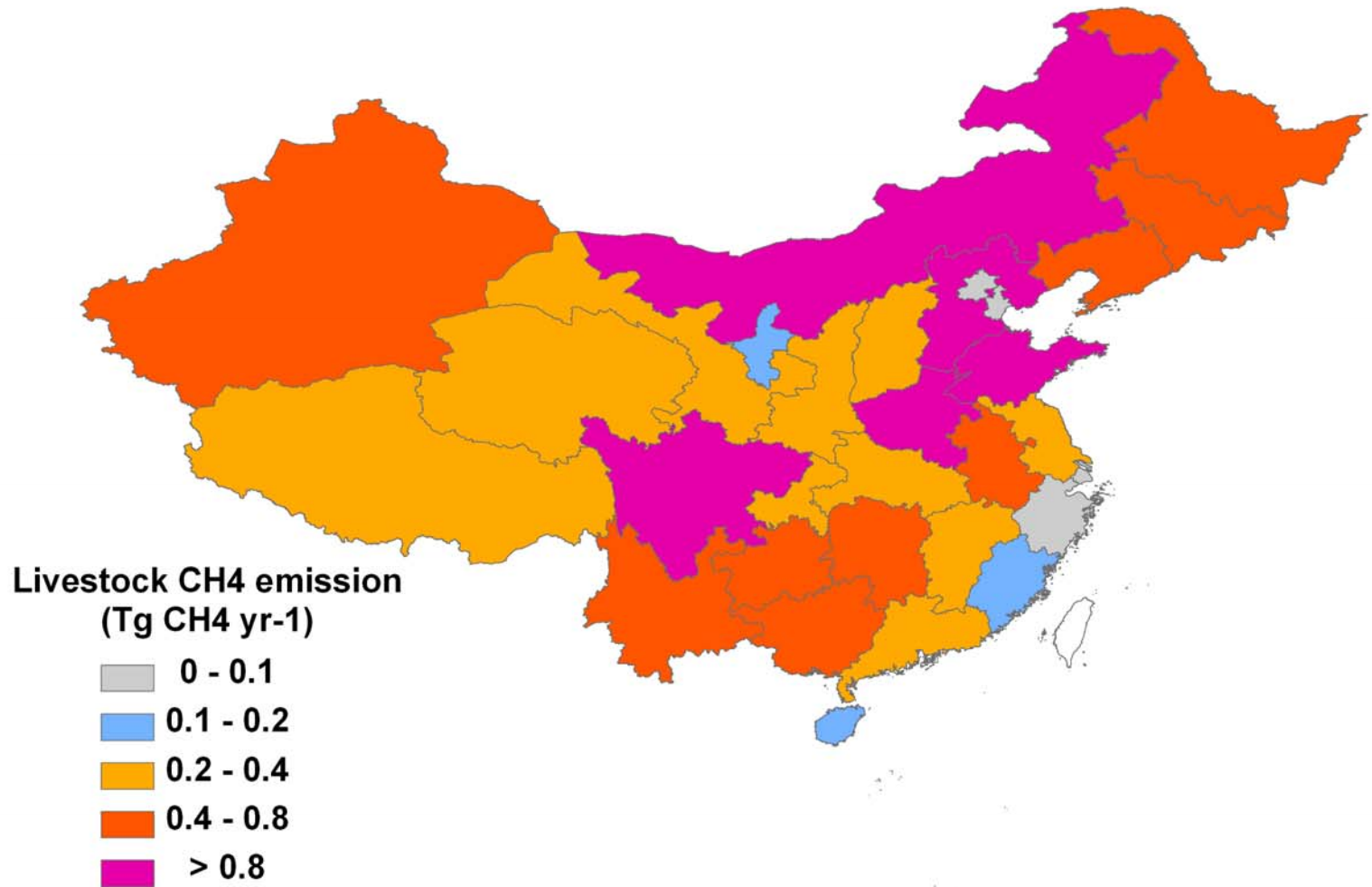


# Total CH<sub>4</sub> emission from livestock

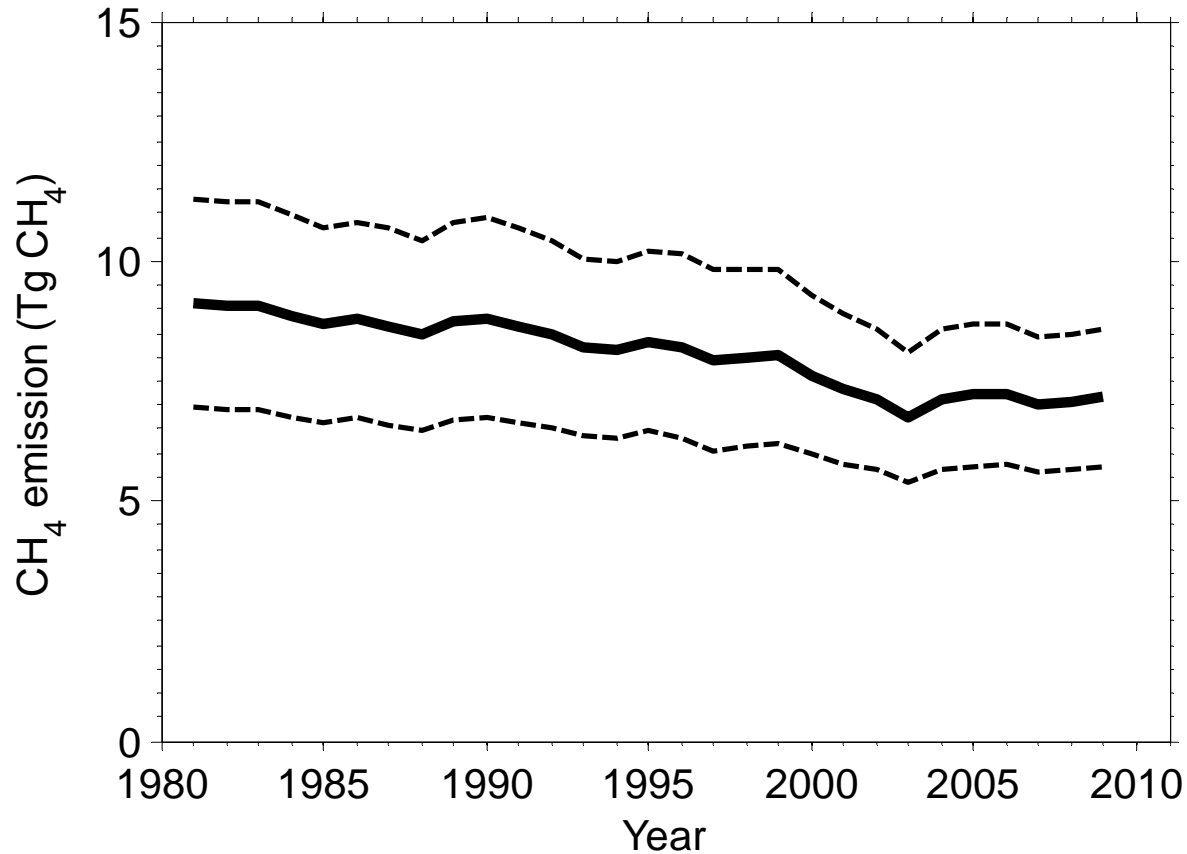


Methods from IPCC, 2006

# Spatial patterns of CH<sub>4</sub> emission from Livestock



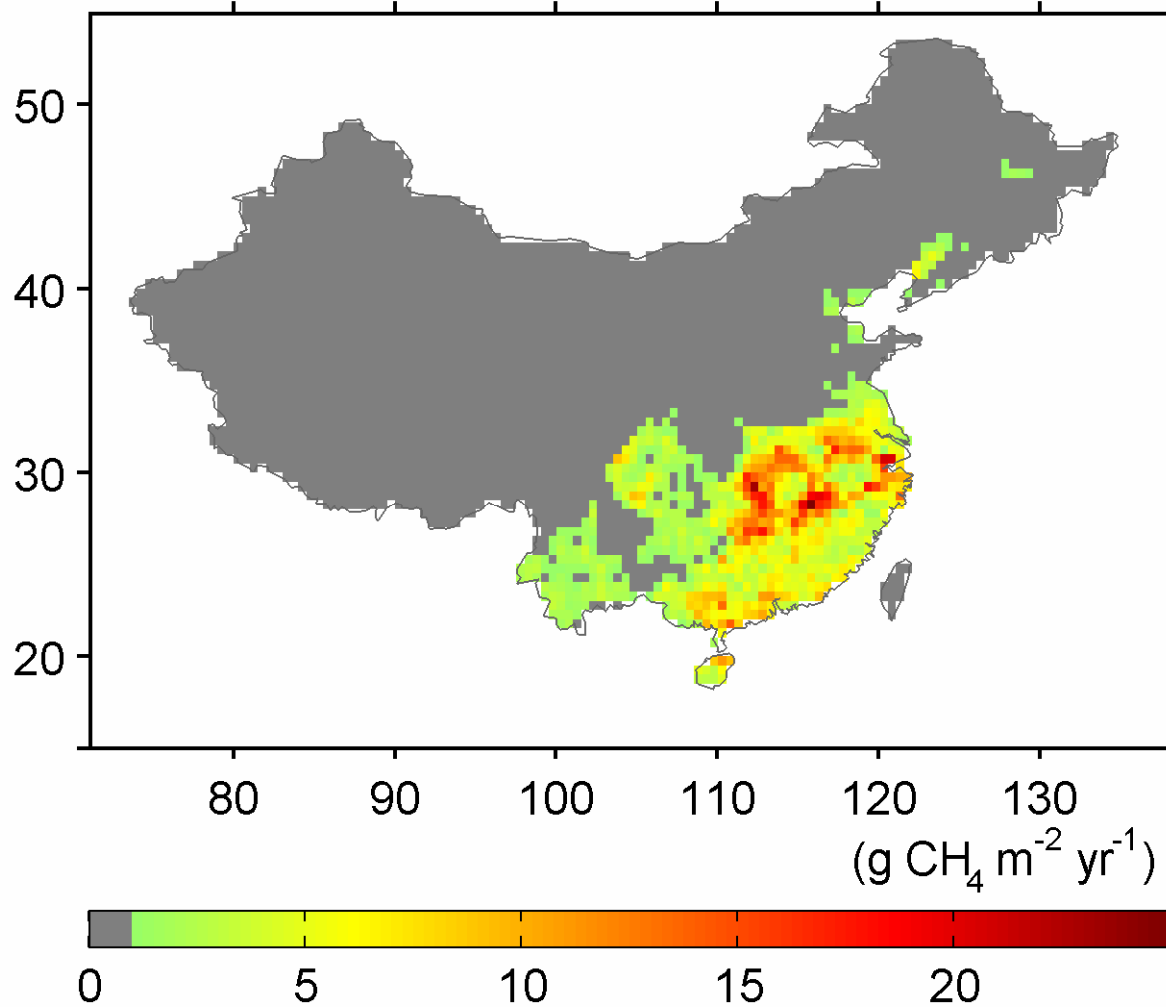
# Total CH<sub>4</sub> emission from Rice cultivation



Methods from Yan et al., 2003, JGR



# Spatial patterns of CH<sub>4</sub> emission from rice cultivation



# Improvements

- Resolution ?
- Yearly ?
- Uncertainty ?